

REMARKS

Claims 1-22 are pending in the application. Claims 1-3, 5, 7, 8, and 17-20 were rejected, claims 4, 6, and 9-16 were objected to, and claims 21 and 22 were allowed. In view of the following remarks, reconsideration of the application is respectfully requested.

Claim Rejections –35 U.S.C. § 102

Claims 1-3, 5, 7, 8, and 17-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kiani et al., U.S. Patent No. 6,137,064 (“Kiani”). Applicant respectfully traverses this rejection and submits that Kiani fails to teach every element of any rejected claim.

Regarding claim 1, the layers 12a-12h asserted by the Examiner as high-speed signaling layers are described in Kiani as ground plane layers (col. 6, ll. 60-64). Further, it does not appear that Kiani discloses “high-speed signaling layers” as defined in the instant application.

More importantly, Kiani fails to disclose a pad with a clearance separating that pad from the remainder of the plane and formed in substantial alignment with a corresponding differential trace conductive pad. Looking at Figs. 7-8C of Kiani, the signal pad 96’ (which it is assumed the Examiner is equating with a differential trace conductive pad) on a signal layer (Fig. 8A) is not aligned with the ground layer 97 (shown in Figs. 7C and 8C). Also, looking at Fig. 7C, ground layer 97 does not have “a first conductive pad with a first clearance separating that pad from the remainder of the plane” as claimed, and in fact has no isolated pad region.

It appears that the Examiner may be asserting that the thru-hole liner shown in Figure 8C is a pad. This is incorrect for at least several reasons, one of which is that the plated thru-hole liner is simply not a pad. A second reason is that the conductive liner is claimed separately as existing in a signaling thru-hole “passing through the first conductive pad” and “electrically connected to” the pad—a liner cannot pass through itself, nor electrically connect to itself.

Regarding the claims drawn to a “plural subset of the ground planes,” Kiani also fails to teach any such structure. Kiani appears to treat all ground planes the same.

Method claims 17-20 are patentable for similar reasons as those asserted above for the device claims.

Allowable Subject Matter

Applicant acknowledged the indication of allowable subject matter in claims 4, 6, and 9-16. Applicant has elected not to amend these claims at the present time, based on the arguments for the patentability of their base claims as presented above.

Applicant also acknowledges the allowability of claims 21 and 22.

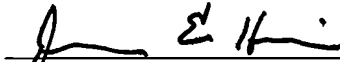
Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-22 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
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